

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-15 (Cancelled).

Claim 16. (New) Integrated circuit comprising at least a digital part comprising a large number of elementary transistors connected to one another so as to form a plurality of functional elements, the functional elements being grouped in subassemblies each comprising a first and a second electrical supply terminal and a clock input, the subassemblies being connected in series by means of their supply terminals to the terminals of a voltage supply source, integrated circuit wherein the clock input of each subassembly is connected to a common clock circuit and the clock input of at least one subassembly is connected to the common clock circuit by means of a device for shifting the levels of the clock signal.

Claim 17. (New) Integrated circuit according to claim 16, wherein the subassemblies are formed in such a way that the sum of the instantaneous supply currents flowing through the functional elements of a subassembly is close to that of the other subassemblies.

Claim 18. (New) Integrated circuit according to claim 16, wherein the clock inputs of at least two adjacent subassemblies are connected by a device for shifting the clock signal levels.

Claim 19. (New) Integrated circuit according to claim 18, wherein the clock input of one of the end subassemblies is connected by means of an additional device for shifting the clock signal levels at the output of the clock circuit.

Claim 20. (New) Integrated circuit according to any claim 16, wherein the device for shifting the clock signal levels comprises at least one capacitor.

Claim 21. (New) Integrated circuit according to claim 16, wherein the device for shifting the clock signal levels comprises at least one transistor.

Claim 22. (New) Integrated circuit according to claim 16, wherein all the subassemblies are identical.

Claim 23. (New) Integrated circuit according to claim 16, wherein each of the subassemblies comprises a voltage limiting circuit connected between its power supply terminals.

Claim 24. (New) Integrated circuit according to claim 23, wherein the voltage limiting circuit comprises a diode.

Claim 25. (New) Integrated circuit according to claim 23, wherein the voltage limiting circuit comprises a transistor.

Claim 26. (New) Integrated circuit according to claim 16, wherein each subassembly comprises a decoupling capacitor connected between the first power supply terminal and the second power supply terminal of the subassembly.

Claim 27. (New) Integrated circuit according to claim 16, wherein the integrated circuit comprises means for electrical insulation between the subassemblies.

Claim 28. (New) Integrated circuit according to claim 27, wherein the means for electrical insulation between the different subassemblies are reverse biased diode junctions.

Claim 29. (New) Integrated circuit according to claim 27, wherein the means for electrical insulation between the different subassemblies are dielectric zones.

Claim 30. (New) Integrated circuit according to claim 16, wherein the integrated circuit comprises silicon blocks achieved from a silicon-on-insulator substrate.